REMARKS

This is intended as a full and complete response to the Office Action dated June 1, 2006, having a shortened statutory period for response set to expire on September 1, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-35 remain pending in the application and are shown above. Claims 1-35 stand rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 12, 13, 28, and 33 are amended to correct matters of form. Claims 1, 2, 16, and 32 are amended to clarify the invention. These amendments are not presented to distinguish a reference; thus, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference.

Claim Objections

Claim 16 is objected to because of a supposed informality regarding antecedent basis. Applicants traverse this objection and respectfully request that the Examiner review claim 16 again where antecedent basis for "the first time period" is provided on lines 2-3.

Claim Rejections - 35 USC § 112

Claims 1-35 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 16, and 32 are rejected because the phrase "wherein the spectral feature of interest has a bandwidth that is significantly greater than the first rate" is not clear.

In response, Applicants have amended claims 1, 16, and 32 to clarify that "the spectral feature of interest varies according to polarization changes at the first rate" and that the "sampling rate is significantly greater than the first rate." Accordingly.

Applicants submit that claims 1, 16, and 32 as amended are definite and respectfully request withdrawal of this rejection.

Claims 2-15, 17-31, and 33-35 are rejected as being dependent on a rejected claim. Applicants submit that independent claims 1, 16, and 32 as amended are definite. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim Rejections - 35 USC § 103

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froggatt (6,856,400). Applicants respectfully traverse the rejection.

Claims 1, 16, and 32 have been amended to further clarify that the wavelength corresponding to the spectral feature of interest is determined by compensating for the polarization of the light such that the wavelength is insensitive to polarization—induced variations. Froggatt does not teach, show, or suggest determining a wavelength that is insensitive to polarization-induced variations. Rather, the objective of Froggatt is to measure the elements of the Jones Matrix Representation for an optical device to characterize the effects of the polarization dependence (col. 2, lines 39-64). In other words, Froggatt supplies light to the input of an optical device and compares it with the output to characterize the effect of the device on the light, including the polarization effects (col. 3, lines 1-2). Therefore, Froggatt would not want to determine a wavelength that is insensitive to polarization-induced variations since the polarization-induced variations introduced by the device under test (DUT) are one of the characteristics Froggatt is trying to measure.

Accordingly, Applicants submit that claims 1, 16, and 32, and claims dependent therefrom, are allowable and respectfully requests withdrawal of this rejection.

Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

The Examiner is invited to telephone the Attorney for the Applicants at the number below should there be any questions regarding the amendments to the claims.

Respectfully submitted,

Randol W. Read

Registration No. 43,876 PATTERSON & SHERIDAN, L.L.P. 3040 Post Oak Blvd. Suite 1500

Houston, TX 77056 Telephone: (713) 623-4844 Facsimile: (713) 623-4846 Attorney for Applicant(s)